

transverse as in it, some of them running longitudinally or obliquely, so as in parts to form faint wide-meshed reticulations; the dorsal line is rather deeper, and reaches to the anterior margin. Scutellum polished. Elytra nearly three times the length of the thorax; very delicately aciculated, though scarcely so finely as in *O. Clarkii*; finely punctate-striate; the interstices without the transverse scratches which occur in *O. Clarkii*; with scarcely a single faint puncture, except on the interstice between the fifth and sixth striæ; the interstices somewhat convex, especially towards the sides, where the striæ are deepest; the space between the sixth and seventh striæ narrowest, and nearly as in *O. Clarkii*, but almost without any widening at the base. Below ferrugineo-piceous; some faint scratches on the episterna, but nothing like the deep oblique wrinkles on the metathoracic episternum in *O. Clarkii*; abdomen nearly as in it. Legs ferrugineo-piceous; thighs rather paler.

This species comes near Dejean's description of *O. brevithorax*; but the latter is described as having the interstices on the elytra all punctate, which is certainly not the case here.

XXXVI.—On *Phyllangia*, a new living British Madrepore.

By PHILIP H. GOSSE, F.R.S.

To the Editors of the *Annals of Natural History*.

GENTLEMEN,

With much pleasure I announce the discovery of an interesting living Madrepore, new to the European seas, if not new to science.

About six weeks ago, Mr. G. H. King, of this town, dredging in Weymouth Bay, brought up a piece of the bottom, about a foot square, evidently the edge of one of the oolite ledges, torn off by the dredge. On this were from fifty to a hundred specimens of a little Madrepore, which was considered to be our common *Cyathina Smithii*. The group was broken up and dispersed; but a fragment having fallen under my notice, I immediately saw in it characters which distinguished it from *Cyathina*.

It proves to be of the genus *Phyllangia* of Milne-Edwards (*Hist. Nat. des Corallaires*), and agrees in the most minute particulars (with one or two slight exceptions) with the *P. americana* of the same author.

The exceptions are—1st. That whereas *P. americana* is described and figured as reaching half an inch in diameter, none of the specimens procured at Weymouth attained (as I was told) quite half those dimensions, those which fell under my own notice not exceeding one-sixth of an inch. 2ndly. That whereas

in *P. americana* the summits of the primary septa are described as arched, in our Weymouth specimen that character exists only in some of them, others, of the same cycle, being obliquely truncate, the outer part being the higher.

These differences are too slight to constitute distinction of species; and hence I conclude that we have on our southern coasts a *Phyllangia* now living, in some abundance, which has hitherto been recognized only as inhabiting the Caribbean Sea.

I was not so fortunate as to see the animal alive, my specimen, though in the flesh, being in an advanced state of decomposition when I obtained it; but Mr. King, who is familiar with *Cyathina Smithii*, speaks of the living *Phyllangia* as having a general resemblance to that species, and tells me that he observed white and green hues. He noticed numerous tentacles, but did not observe whether they were knobbed.

It may be fairly expected that more specimens will be obtained of this interesting little Coral; and to facilitate the search for it, I may mention that this colony was taken just under White-nose.

The following diagnosis may assist in its recognition:—

MADREPORARIA.

Tegumentary structure solidified so as to form a proper corallum.

APORA.

Visceral chamber free, or subdivided transversely by irregular projections. Septa well developed. Sclerenchyma compact.

Astræidæ.

Intersepts more or less divided transversely by projecting plates. Visceral cavity not obliterated, but only subdivided. No cœnenchyma. Walls imperforate.

ASTRÆINA.

Septa toothed.

ASTRANGIACEÆ.

Increasing by buds, which spring from stolons, or from creeping basal expansions. Polypary always remaining very short.

Phyllangia.

Wall naked, ribbed. No false cœnenchyma. Primary septa with the upper edge untoothed. Columella rudimentary.

P. americana. Four cycles of septa. Primary septa with the outline of their summits arched.

May I be permitted to add that if any naturalist, under whose eye this notice may fall, possesses, or should at any future time possess, a living specimen of this Madrepore, I should esteem it a particular favour to be allowed an opportunity of figuring it in my 'Actinologia Britannica.'

I am, Gentlemen,

Yours respectfully,

P. H. GOSSE.

Sandhurst, Torquay, Oct. 20, 1858.

XXXVII.—On *Arctium*. By CHARLES C. BABINGTON, M.A.,
F.R.S. &c.

At the Meeting of German Naturalists in 1857, Herr Candidat Nitzchke made a communication concerning the genus *Lappa* of Tournefort; and as he takes especial notice of my paper upon *Arctium* (A. N. H. ser. 2. xvii. 369), some reference to it seems desirable. He informs us that *L. major*, *L. minor*, and *L. tomentosa* are usually distinguished in Germany, and also that the *L. intermedia* of Lange has been observed several times, and does not seem to be scarce in Silesia. He arrives at the opinion that the three first-named are true species, but that there are frequent hybrids between them, such as *L. minor-tomentosa*, corresponding with my *A. pubens*, and *L. major-minor*, synonymous with Lange's *A. intermedium*. He gives no proof of the fact, except that the plants are often found in each other's company. Unfortunately there is a tendency amongst German botanists to declare everything a hybrid which is of difficult determination and nearly allied to other species. Agreeing with Fries, and with the great body of zoologists, in thinking that plants and animals very rarely hybridize in a wild state, I am not prepared to accept M. Nitzchke's view concerning the *Arctia*. It is not a mere statement of opinion which will determine such a question. He allows that his supposed hybrids produce seed which is apparently perfect. Let these seeds be sown and the results remarked for a few years. If they are fertile hybrids, I believe that the progeny will gradually revert towards one of the parent species until they become undistinguishable from it.

M. Nitzchke remarks that "these questionable species appear but seldom, and isolated, as is generally the case with hybrid plants." Such is probably their condition in Germany, and may be the fact with *A. intermedium* in Britain; but certainly this does not describe the mode of occurrence of *A. pubens* in Ireland. Until the summer of 1858, I should have been unable to state